

REMARKS

Applicants wish to thank Examiner Dote for the helpful discussion on October 10, 2007. Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The rejections of Claims 54-70 and 79-83 under 35 USC 112, 1st and 2nd paragraphs is obviated by the amendment of the Claims.

The objection to the Claims 54, 58, 63 and 67 is obviated by the amendment of the Claims.

In **Claims 54, 58, 63 and 67**, the charge generation layer comprises
as **charge generation materials which have spectral sensitivity in differing
wavelength regions:**

at least one phthalocyanine pigment and
at least one asymmetric bisazo pigment of formula (II)
combined with 0.1 to 5 parts by weight of **an organic sulfur-containing compound**,
based on 100 parts by weight of a charge transport material; wherein said organic sulfur-
containing compound is selected from the group consisting of compounds having the
formulas III, S-1, S-2 and S-3.

None of JP'998, JP '250, JP '890, Schaeffert, and Tanigawa, Kanoto, Kakuta, or Byrne disclose or suggest a charge generation layer which comprises as charge generation materials which have spectral sensitivity in differing wavelength regions, at least one phthalocyanine pigment and at least one asymmetric bisazo pigment of formula (II) and which are combined with 0.1 to 5 parts by weight of an organic sulfur-containing compound of formulas III, S-1, S-2 or S-3.

When two or more kinds of pigments are used as charge generation materials, the spectral sensitivity range of the photosensitive layer can be widened. See page 2, lines 10-19 of the specification.

However, since two or more energy levels are formed in the charge generation layer, the characteristics of the pigments cannot be well exhibited and in addition increase of residual potential and decrease of potential of the photoreceptor cannot be avoided at the same time even when optimizing the formula of the photosensitive layer.

It is found in the present invention that by adding an organic sulfur-containing antioxidant to the photosensitive layer, a photoreceptor having a good combination of durability and resistance to light fatigue can be prepared. See page 5, line 17 to page 6, line 7 of the specification.

Specifically, the organic sulfur-containing antioxidants act effectively for the energy gap caused by use of two or more charge generation materials and dissolve or decrease the trap level while having good solubility in the binder resins and charge transport materials used for the photosensitive layer, resulting in prevention of a problem in that the material is separated there from.

The technical effects (e.g., decrease in number of black spots and prevention of occurrence of background fouling) produced by addition of an organic sulfur-containing antioxidant are clearly described in the present specification. See page 8, line 11 to page 9, line 9 and Tables 12, 13 and 16 of the specification.

In contrast, JP'998, JP '250, JP '890, Schaeffert, and Tanigawa, Kanoto, Kakuta, or Byrne neither disclose nor suggest the problem caused by using two kinds of pigments having

different spectral sensitivity properties. In addition, JP '250 neither discloses nor suggests that sulfur-containing antioxidants act effectively for the energy gap caused by use of two or more charge generation materials by dissolving or decreasing the trap level. See also page 4, lines 10-12 of the specification. Therefore, there is no motivation to use an organic sulfur antioxidant described in JP '250 for the photosensitive layers of the photoreceptors of JP '890 and JP '998.

Although it is described in paragraph [0027] of JP '998 that antioxidants can be used, compounds such as hindered phenols, sulfur-containing antioxidants, phosphor-containing antioxidants, and hindered amines are merely exemplified, and there is no description of the claimed organic sulfur-containing antioxidants having the formulas III, S-1, S-2 or S-3. Therefore there is no motivation to use the antioxidants.

Thus, JP'998, JP '250, JP '890, Schaeffert, and Tanigawa, Kanoto, Kakuta, or Byrne neither disclose nor suggest that use of two or more kinds of pigments having different spectral sensitivity properties as charge generation materials causes the problem, and that organic sulfur-containing antioxidants act effectively for the energy gap caused by use of two or more charge generation materials and dissolve or decrease the trap level. There is no motivation to use an organic sulfur antioxidant described in JP '250 for the photosensitive layers of the photoreceptors of JP '890 and JP '998. Therefore, the present invention is not obvious.

In view of the above, the rejections of record over JP'998, JP '250, JP '890,
Schaeffert, and Tanigawa, Kanoto, Kakuta, or Byrne should be withdrawn.

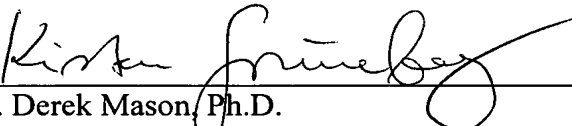
Applicants submit that the present application is now in condition for allowance and
early notice of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Customer Number
22850

Tel.: (703) 413-3000
Fax: (703) 413-2220


J. Derek Mason, Ph.D.
Registration No. 35,270

Kirsten A. Grueneberg, Ph.D.
Registration No.: 47,297